# Chesapeake Water Association's Annual Water Quality Report



For the calendar year 2009 Maryland Public Water System #040004

The Chesapeake Water Association is pleased to present this report to its member subscribers. In the last year, the Board of Directors and staff of Chesapeake Water Association (CWA) have been busy at the job of protecting, defending, and preserving your good water supply.

### SAFETY OF YOUR DRINKING WATER

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. CWA vigilantly safeguards its water supplies and once again we are proud to report that our system has not violated any water quality standard.

#### IF I HAVE A MEDICAL CONDITION DO I NEED TO TAKE SPECIAL PRECATIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Giardia and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

## WHERE DOES OUR WATER COME FROM?

Your water comes from deep wells in the Aquia aquifer formation. The Aquia aquifer is the primary source of drinking water for the majority of public water systems in Calvert and St. Mary's counties.

#### ARE THERE CONTAMINANTS IN MY DRINKING WATER?

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

#### SOURCE WATER ASSESSMENT AND ITS AVAILABILITY

A comprehensive source water analysis summary for all public water supply systems in Calvert County has been produced by the Maryland Department of the Environment. That document is available from the MDE, Water Supply Division. It is also available through the public library system.

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#### **HOW CAN I GET INVOLVED?**

Drinking water supply and treatment is everyone's concern. The Board of Directors encourages everyone to get involved in issues concerning your drinking water supply system. The best way to start getting involved is to get informed. Please feel free to contact our office for more information on how you can get involved. Just do it.

### **ADDITIONAL INFORMATION FOR ARSENIC**

Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer. CWA employs a treatment technique (TT) to maintain the lowest possible levels of arsenic from our groundwater systems well below the maximum contaminant level. A violation would occur only if the average of quarterly samples exceeded the MCL.

#### ADDITIONAL INFORMATION FOR DISINFECTION BYPRODUCTS

The EPA has promulgated the Stage 1 and Stage 2 Disinfection Byproduct Rule (DBPR). This rule affects all drinking water systems that disinfect. CWA has submitted the required documentation to the EPA and MDE in the form of a system management plan (SMP) that will require quarterly testing until such time regulators decide to place the system on reduced monitoring. Tests conducted to date indicate that there is little potential for byproducts contamination in this system due to its groundwater source. BBP's are most problematic in systems that utilize chlorine disinfectant with surface water containing organic matter.

#### **TEST INFORMATION**

The table below lists the drinking water contaminants we detected that are applicable for the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

Test results for a large number of potential contaminants are maintained at the CWA offices. Copies of these results are available upon request.



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|                              | WWA SA SEL J           | 210  |                 | RAN  |       |                  | 2000      |                                      |
| CONTAMI-<br>NANT             | MCLG                   | MCL  | YOUR WA-<br>TER | LOW  | HIGH  | SAMPLE<br>PERIOD | VIOLATION | TYPICAL<br>SOURCE                    |
| Inorganic C                  | Inorganic Contaminants |      |                 |      |       |                  |           |                                      |
| Arsenic<br>(ppb)**           | 0                      | 10   | < 10            | 4    | 9.8   | 2009             | NO        | Erosions of<br>natural de-<br>posits |
| Lead (ppb)                   | 0                      | 15   | 0               | 0    | 0     | 2008             | No        | Corrosion of plumbing                |
| Copper<br>(ppb)***           | 0                      | 1300 | <60             | 0    | 60    | 2008             | No        | Corrosion of plumbing                |
| Disinfection By Product      |                        |      |                 |      |       |                  |           |                                      |
| Triha-<br>lomethane<br>(ppb) | NA                     | NA   | <5.1            | 0    | 5.1   | 2009             | No        | Disinfection<br>Byproduct            |
| HAA5<br>(ppb)*               | NA                     | NA   | .0              | 0    | 1     | 2009             | No        | Disinfection<br>Byproduct            |
| Radium 228<br>(pCi/L)        | NA                     | NA   | <0.1            | 0    | 0.1   | 2009             | No        | Disinfection<br>Byproduct            |
| Coliform<br>Bacteria         | 0                      | 0    | 0               | 0    | 0     | 2009             | No        | Fecal mat-<br>ter                    |

<sup>\*</sup> Total Haloacetic Acids

# **Unit Descriptions & acronyms**

| UNITS: | <u>DEFINITION</u>                                 |
|--------|---|
| ppm    | parts per million, or milligrams per liter (mg/l) |
| ppb    | parts per billion, or micrograms per liter (μg/l) |

**Acronym** 

Not Applicable NA ND Not Detected

NR Monitoring not required, but recommended

**DBP** Disinfection Byproduct

MCLG Maximum Contaminant Level Goal MCL Maximum Contaminant Level

Treatment Technique: TT

Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other require-AL

ments which a water system must follow.

For more information please contact:

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Email: gmcrwc@comcast.net

<sup>\*\*</sup>Based on the average of quarterly sampling
\*\*\*Based on the 90<sup>th</sup> percentile of 20 samples taken between June and September, 2008

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# **Important Drinking Water Definitions**

<u>Term</u> Definition

TT

MCLG: Maximum Contaminant Level Goal: The level of a contaminant in

drinking water below which there is no known or expected risk to health.

MCLGs allow for a margin of safety.

MCL: Maximum Contaminant Level: The highest level of a contaminant that

is allowed in drinking water. MCLs are set as close to the

MCLGs as feasible using the best available treatment technology.

TT: Treatment Technique: A required process intended to reduce the

level of a contaminant in drinking water.

AL: Action Level: The concentration of a contaminant which, if exceeded,

triggers treatment or other requirements which a water system must follow.

Variances and Exemptions Variances and Exemptions: State or EPA permission not to meet an

MCL or a treatment technique under certain conditions.

MRDLG: Maximum residual disinfection level goal. The level of a

drinking water disinfectant below which there is no known or expected

risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to

control microbial contaminants.

MRDL: Maximum residual disinfectant level. The highest level of a

disinfectant allowed in drinking water. There is convincing evidence that

addition of a disinfectant is necessary for control of microbial contaminants.

MNR: Monitored Not Regulated

MPL: State Assigned Maximum Permissible Level

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